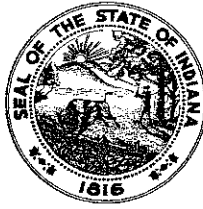


STATE OF INDIANA

DEPARTMENT OF LOCAL GOVERNMENT FINANCE



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TO: Assessing Officials and Vendors

FROM: Barry Wood, Assessment Division Director *JBW*

RE: Release of Updated Cost Information for 2013 Annual Adjustment

DATE: October 31, 2012

The Department of Local Government Finance ("Department") is releasing updated cost schedules for the 2013 Annual Adjustment. This release includes all cost schedules in Appendix C and Appendix G of the current Real Property Guidelines, including the Location Cost Modifier.

These updated cost schedules should be used to establish the replacement cost new (RCN) for residential, commercial, and industrial improvements for the 2013 Annual Adjustment (2013 pay 2014). Adjusting the RCN for accumulated depreciation provides one estimate of the property's assessed value. **However, the assessor should adjust this cost estimate with local market information such as sales data to determine the market value-in-use of the subject property prior to tax billing.**

The Department is in the process of updating a depreciation schedule for the 2014 Assessment date (2014 pay 2015). An update for the 2013 assessment date is not possible at this time because of the need for additional assessment data comparing the costs and sales of comparable properties. Note that the depreciation base year for the 2013 Annual Adjustment will be March 1, 2013.

Scope of the Update

The cost schedules were updated with cost data from the Craftsman cost service. The costs used are listed in the 2012 *Craftsman National Construction Estimator* (NCE) and 2012 *Craftsman National Building Cost Manual* (NBC Manual).

Most cost schedules were updated with the material, labor, and equipment costs for the different unit costs used in the respective cost model. The Craftsman Area Modification Factors for the Indianapolis zip code 46204 were applied to each of these 3 costs. These factors are available in the Craftsman *National Estimator* software program, which is bundled with the 2012 NCE. The factors in this program are stratified by zip code, and more accurate than the factors listed in the print edition of the NCE. The factors are:

- Materials: 1.00
- Labor: 1.19
- Equipment: 1.00

When unit cost data was not available, cost schedules were adjusted with factors representing the average increase in construction costs from 2011 to 2012. These factors are listed in the Building Cost Historical Index table of the NBC Manual. Different factors were used for different types of construction. The factors are:

- Wood Frame: 1.04
- Masonry/Concrete: 1.01
- Steel: 1.12
- Agricultural: 1.02

When a general cost factor was needed, the average of the wood frame and masonry/concrete factors (1.025) was used.

All unit costs include the contractor's overhead and markup. Following the 2012 NCE, this was set at 25% of the unit cost. As in the 2011 cost update, a Verified Economic Modifier (VEM) was calculated from residential new home costs to adjust the cost schedules to the Indiana market. As in 2011, the VEM adjusted the schedules downward by 30%; therefore, the net adjustment to Craftsman unit costs for overhead, markup, and current Indiana economic conditions is -5%.

Summary of Key Changes in Updated Costs

Primary Cost Schedules

- Costs in the Dwelling Base Rate schedule increased. On average, first floor dwelling costs increased 2% while second floor dwelling costs increased 4%. Brick costs increased about 1% more than frame costs. Attic costs increased 9% on average for attics with and without finish.
- Costs in the General Mercantile (GCM) schedule increased 1% on average, except for upper floor costs which increased 3% on average.
- Costs in the General Industrial (GCI) schedule increased 2% on average. The largest change was in first floor semi-finished costs, which increased 5% to 9% for some use types. Wall height adjustment costs also changed more than average, with Type 1 and Type 2 walls decreasing 4% on average and Type 3 walls increasing 10% on average.
- Costs in the General Residential (GCR) schedule changed very little, except for the Basement Apartment costs which decreased by 4% on average.

Auxiliary Cost Schedules

- Specialty plumbing item costs decreased by an average of 36%. This substantial decrease is due to changes in Craftsman's methodology for pricing saunas and other specialty plumbing items.

- Car shed costs increased by 25% on average and swimming pool enclosures increased by an average of 22%. In both cases, the increases are concentrated on structures with very low areas. The increases are due to economy of scale factors and increases in Craftsman unit costs.
- Service stations and public restroom buildings increased by an average of 12%. These items are priced from base rates provided by Craftsman, and the increase is due to the increase in the base rates.
- Some agricultural building costs increased because of changes the Department made in our cost models. The largest increases are on very small structures that should not be regularly encountered in normal assessment practice. The next section explains these cost updates in more detail.

Updated Pole-Frame Cost Model

In addition to updating the models with 2012 Craftsman costs, the cost model for pole-frame buildings was re-specified. This model is used to price structures in Schedule A.4: GCK Base Rates.

To design the revised pole-frame model, the Department reviewed building plans and construction methods on pole-frame buildings to determine standard practices used in contemporary pole-frame construction. Based on this review, a model was designed that detailed the material, labor, and equipment costs typical of pole-frame construction. Model parameters such as total square footage and were estimated from data on Indiana pole-frame structures. Field reviews of pole-frame structures were also conducted to reconcile typical pole-frame construction with actual Indiana pole-frame structures.

Based on this analysis, several models were developed with different pole spacing and estimates of overhead and markup. The final model was reconciled with cost estimates from three Indiana pole-frame builders. The resulting model represents the typical cost of constructing different size pole-frame buildings, and explains in detail the assumptions made by the Department to value these buildings.

Updated Agricultural Structure Cost Models

The cost models for several types of agricultural structures were also re-specified. This is necessary because the assumptions used in current models for these schedules are no longer valid: for example, more restrictive environmental standards mean that hog pits are more expensive to construct than in the past. Cost models that use pole-frame construction also needed to be updated since the pole-frame model was updated. The updated models are:

- Type (3) Barns and Sheds
- Hog Confinement
- Veal Confinement
- Poultry Confinement
- Milking Parlor
- Milk House

For each model, the Department examined construction blueprints to determine typical material, labor, and material costs used in construction. Field visits and property record cards of representative Indiana structures were also consulted. Industry documents were also reviewed to determine legal or best practice guidelines for animal housing and maintenance: for example, the required lighting and ventilation for a modern poultry confinement. For each model, parameters such as the economy of scale were estimated from Indiana data. Each model was also reconciled with Indiana builder quotes or square-foot base rates for similar structures from the Craftsman NBC Manual.

Copies of the individual cost models and all supporting documentation used in their construction are available upon request.

If you have any questions, please contact Barry Wood, Assessment Division Director, at 317.232.3762 or bwood@dlgf.in.gov; or David Schwab, Senior Statistician/Application Systems Analyst, at 317.234.5861 or dschwab@dlgf.in.gov.